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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

ANDREW E. FANO	Applicant,	Attorney Docket No.: 33836.00.0032 Serial No.: 10/064,477 Filing Date: Jul. 18, 2002 Title: Media Indexing Beacon and Capture Device
CINDY NGUYEN	Examiner.	
ART UNIT: 2161		

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicant submits this brief in furtherance of the above identified application, for which a Notice of Appeal is contemporaneously filed herewith.

CONTENTS

Table of Authorities iv

I. Real Party in Interest 1

II. Related Appeals and Interferences 1

III. Status of Claims 1

IV. Status of Amendments 2

V. Summary of Claimed Subject Matter 2

VI. Grounds of Rejection to be Reviewed On Appeal 7

VII. Argument 7

A. Claims 1 through 8, 10 through 20, 23 through 25, 27, 29 and 32 are not unpatentable under 35 USC § 103(a) over *Cobbley*, in view of *Narayanaswami*, because *Cobbley* and *Narayanaswami*, individually or in combination, do not teach all claim limitations as required to establish prima facie obviousness and further there is no motivation to combine 7

1. Examiner's Burden to Establish Prima Facie Obviousness and Motivation to Combine Reference Teachings 7

2. Summary of the *Cobbley* Reference 9

3. Summary of the *Narayanaswami* Reference 10

4. *Narayanaswami* does not teach "index information separate from the media file from an external source related to the subject and comprising an event indicator that a specific event is occurring" as recited by Applicant's independent claim 1 12

5. *Narayanaswami* teaches away from "index information separate from the media file from an external source related to the subject and comprising an

event indicator that a specific event is occurring" as recited by Applicant's independent claim 1.....15

6. There is no motivation to combine *Cobbley* and *Narayanaswami* because at least *Narayanaswami* would be "unsatisfactory for its intended purpose".....16

7. *Cobbley* and *Narayanaswami* fail to establish a prima facie case with respect to dependent claims 4, 5, 6 and 7.....16

a. Regarding dependent claim 4.....16

b. Regarding dependent claim 5.....17

c. Regarding dependent claim 6.....18

d. Regarding dependent claim 7.....19

8. *Cobbley* and *Narayanaswami* fail to establish a prima facie case with respect to independent claims 8 and 13.....19

9. *Cobbley* and *Narayanaswami* fail to establish a prima facie case with respect to independent claims 19, 25, 27 and 29.....21

10. Prima Facie Obviousness Cannot Be Established Using *Cobbley* and *Narayanaswami* for independent claims 1, 8, 13, 19, 25, 27 and 29, therefore dependent claims 2-7, 10-12, 14-18, 20, 23, 24 and 32 cannot be properly rejected.....22

a. Regarding claims 21 and 22.....22

B. Conclusion.....24

VIII. Claims Appendix

IX. Evidence Appendix

X. Related Proceedings Appendix

TABLE OF AUTHORITIES

Cases

KSR International Co. v. Telflex, Inc., 550 U.S. ___; 82 USPQ2d 1385, 1395 (2007).....9

Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*).....13

Statutes

35 USC § 103(a) ..... passim

Patent Office Procedures

MPEP § 2142 (Rev. 6, Sep. 2007)..... 7
MPEP § 2143A..... 8, 15
MPEP § 2143G..... 8
MPEP § 2143.01V..... 9, 16
MPEP § 2145XD..... 9, 16
MPEP § 2111..... 13

OIPE
MAR 31 2008
PATENT & TRADEMARK OFFICE
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I. REAL PARTY IN INTEREST

The real party in interest is Accenture Global Services GmbH, by virtue of an assignment duly executed by the named inventor and recorded in the United States Patent and Trademark Office on July 18, 2002, Reel/Frame: 012898/0491.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to the Applicant, the Applicant's legal representative, or assignee which would directly affect or be directly affected by or having a bearing on the Board's decision in this pending appeal.

III. STATUS OF CLAIMS

Claims 1 through 8, 10 through 25, 27, 29 and 32 are pending, and are presented for review on appeal.

Claims 1 through 8, 10 through 20, 23 through 25, 27, 29 and 32 are rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent No. 5,818,510 (issued Oct. 6, 1998) to Cobbley, et al. [hereinafter "Cobbley"], in view of U.S. Patent Application Publication No. 2003/0011684 (published Jan. 16, 2003) by Narayanaswami, et al. [hereinafter "Narayanaswami"].

Claims 21 through 22 are rejected under 35 USC § 103(a) over Cobbley in view of Narayanaswami and further in view of U.S. Patent No. 5,822,537 (issued Oct. 13, 1998) to Katseff, et al. [hereinafter "Katseff"].

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the Final Office Action mailed Dec. 12, 2007.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Applicant presents 27 claims for review on appeal, with seven independent claims; 1, 8, 13, 19, 25, 27 and 29. The appealed claims relate to a system, apparatus, method and a computer readable medium for a media capture device that creates media files and receives indexing information from an external source, a media indexing beacon. See Applicant's Published Specification, U.S. Patent Application Publication No. 2004/0015467, page 2, ¶¶ 0008 to 0012 (published Jan. 22, 2004) [hereinafter "Spec."].

Claim 1 provides a method for media indexing comprising: capturing a subject in a media file with a media capture device (See Spec., FIG. 4 item 402 FIG. 5, 504); automatically receiving, by the media capture device, index information, separate from the media file from an external source (FIG. 4, item 404), related to the subject and comprising an event indicator (page 2, ¶ 0025) that a specific event is occurring; and associating (FIG. 4, 406), by the media capture device, the index information with the media file.

Claim 2 depends from claim 1 and adds wherein associating the index information with the media file further comprises: encoding the index information into the media file (FIG. 4, item 408). Claim 3 depends from claim 1 and adds providing the media file and the index information to a media file storage device (FIG. 4, 410) which comprises a plurality of stored media files having index information associated therewith (FIG. 4, 412); and storing the media file along

with the plurality of stored media files (FIG. 4, 410). Claim 4 depends from claim 3 and adds the feature of searching the plurality of stored media files using the index information (FIG. 4, 412) and enabling a commercial system (page 2, ¶0012) with the plurality of stored media files using the index information. For example, a user could photograph a product on a store shelf and have additional product details stored along with the image in a searchable format.

Claim 5 depends from claim 1 and provides that the index information, prior to being associated with the media file, is transmitted from a media indexing beacon (FIG. 6, 608; FIG. 7, 708). Claim 6 depends from claim 5 and provides that the index information is received in response to an index information request (FIG. 7, 708).

Claim 7 depends from claim 1 and specifies the index information as including at least one of: a time indicator, a landmark indicator, a global positioning system indicator, commercial information (page 2, 0026), a universal resource locator (page 2, 0012, 0026), and a proximity indicator.

Independent claim 8 is related to a media indexing beacon (FIG. 5, 502) external to a media capture device (FIG. 5, 504), and a method for media indexing comprising: storing index information (FIG. 5, 506, 508) relating to a subject and comprising an event indicator that a specific event is occurring (page 2, ¶ 0025); receiving an index information request that is generated by the media capture device (FIG. 6, 604, FIG. 7, 704); and transmitting the index information (FIG. 6, 608, FIG. 7, 708) relating to the subject separately to the media capture device in response to receiving the index information request.

Claim 10 depends from claim 8 and adds that the media capture device receives the index information and associates the index information with a media file (FIG. 6, 614). Claim 11 depends from claim 8 and adds that the index information is wirelessly transmitted to the media capture device (FIG. 5, beacon transmitter 514 and beacon receiver 518, media capture device

transmitter/receiver 522). Claim 12 depends from claim 8 and adds that the index information comprises at least one of the following: a time indicator, a landmark indicator, a global positioning system indicator, commercial information (page 2, 0026), a universal resource locator (page 2, 0012, 0026), and a proximity indicator.

Independent claim 13 is a method for media indexing comprising: capturing a subject in a media file with a media capture device (FIG. 6, 612, FIG. 7, 712, FIG. 4, 402); providing index information separate from the media file from a media indexing beacon to the media capture device (page 2, 0027), wherein the media indexing beacon is external (FIG. 3, 302) to the media capture device (FIG. 3, 304) and the index information relates to the subject in the media file and comprises an event indicator that a specific event is occurring (page 2, ¶ 0025); and associating, by the media capture device, the index information with the media file (FIG. 4, 406; FIG. 6, 614; FIG. 7, 714).

Claim 14 depends from claim 13 and adds prior to providing index information from the media indexing beacon, detecting, by the media capture device, a user input to capture the media file (FIG. 6, 602; FIG. 7, 702); and providing, by the media capture device, an index information request to the media indexing beacon (FIG. 6, 604; FIG. 7, 704). Claim 15 depends from claim 13 and recites providing, by the media capture device, the media file having the index information associated therewith to a media file storage device (FIG. 7, 716; FIG. 4, 410; FIG. 6, 616). Claim 16 depends from claim 15 and provides that the media files with the indexing information are searchable. (FIG. 4, 412; FIG. 6, 618). Claim 17 depends from claim 13 and specifies the index information similar to claim 7. Claim 18 depends from claim 17 and adds the feature of enabling a media file to be utilized by at least one commercial system (FIG. 7, 718, 720), wherein the at least one commercial system comprises at least one of a workflow system, a

procurement system, a retail sales system, and a safety inspection/auditing system. (page 5, 0053 to 0055)

Independent claim 19 recites a media capture and indexing system comprising: a media indexing beacon (FIG. 5, 502) which generates a beacon signal (FIG. 5, 526) containing index information (FIG. 5, 506, 508) relating to a subject and comprising an event indicator that a specific event is occurring; and a media capture device (FIG. 5, 504), separate from the media indexing beacon, that captures the subject in a media file and separately receives the beacon signal from the media indexing beacon and associates the index information with the media file.

Claim 20 depends from claim 19 and adds a media file storage device (FIG. 5, 546, 548) that receives the plurality of media files, wherein the plurality of media files may be indexed based on the index information. Claim 21 depends from claim 19 and adds at least one index buffer (FIG. 5, 536) comprising the index information; and a transmitter (FIG. 5, 522) operably coupled to the at least one index buffer, wherein the transmitter provides the index information to the media capture device. Claim 22 depends from claim 21 and adds that the media indexing beacon (FIG. 5, 502) further comprises a receiver (FIG. 5, 518) that receives an index information request (FIG. 5, 524) from the media capture device, wherein the transmitter transmits the index information in response to the index information request. Claim 23 depends from claim 19 and adds a media input module (FIG. 5, 538) which generates the media file in response to a media file generation request; a processor (FIG. 4, 532) operably coupled to the media input module to receive the media file; and an index information receiver (FIG. 5, 522) operably coupled to the processor, wherein the index information receiver receives the beacon signal and provides the index information to the processor, wherein the processor associates the index information with the media file. Claim 24 depends from claim 23 wherein the index

information receiver (FIG. 5, 522) further contains a transmitter that transmits an index information request to the media indexing beacon (FIG. 5, 502 to the receiver 518).

Independent claim 25 recites a system for media indexing comprising means for storing index information (FIG. 5, 532, 546, 548) relating to a subject and comprising an event indicator that a specific event is occurring; means for transmitting a beacon signal (FIG. 5, 502, 514) wherein the beacon signal comprises the index information; and a media capture device (FIG. 5, 504), separate from the means for transmitting the beacon signal, that captures the subject in a media file (page 2, 0024, FIG. 2, 200-208), wherein the media capture device separately receives the index information (FIG. 5, 508) from the beacon signal and associates the index information with the media file.

Independent claim 27 recites an apparatus for media indexing comprising means for capturing a subject in a media file (FIG. 2, 200 to 208); means for receiving . . . (FIG. 5, 522) and means for associating . . . (FIG. 5, 532; page 4, ¶ 0043).

Independent claim 29 is an apparatus claim directed to a computer readable medium (FIG. 5, 548) having stored thereon the items recited in the previous independent claims: a media file of a subject; and index information, associated with the media file, wherein the media file and index information are stored on the medium at substantially the same time; and wherein the media file is captured by a media capture device and the index information, comprising an event indicator that a specific event is occurring, is transmitted separately to the media capture device by a media indexing beacon external to the media capture device.

Claim 32 depends from claim 27 and adds that the apparatus comprises a digital camera (page 3, ¶ 0029) nd wherein the means for receiving index information includes a wireless receiver (page 2, ¶ 0028).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1 through 8, 10 through 20, 23 through 25, 27, 29 and 32 are unpatentable under 35 USC § 103(a) as being obvious given Cobbley in view of Narayanaswami.

2. Whether claims 21 and 22 are unpatentable under 35 USC § 103(a) given Cobbley in view of Narayanaswami and further in view of Katseff.

VII. ARGUMENT

A. Claims 1 through 8, 10 through 20, 23 through 25, 27, 29 and 32 are not unpatentable under 35 USC § 103(a) over *Cobbley*, in view of *Narayanaswami*, because *Cobbley* and *Narayanaswami*, individually or in combination, do not teach all claim limitations as required to establish prima facie obviousness and further there is no motivation to combine

1. Examiner's Burden to Establish Prima Facie Obviousness and Motivation to Combine Reference Teachings

"If the examiner determines there is factual support for rejecting the claimed invention under 35. U.S.C. § 103, the examiner must then consider any evidence supporting the patentability of the claimed invention, such as any evidence in the specification or any other evidence submitted by applicant." **MPEP** § 2142, page 2100-128 (Rev. 6, Sep. 2007) "The ultimate determination of patentability is based on the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and secondary

evidence." Id. (citing In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992)). "The legal standard of "a preponderance of evidence" requires the evidence to be more convincing than the evidence which is offered in opposition to it." Id. "With regard to rejections under 35 U.S.C. § 103, the examiner must provide evidence which as a whole shows that the legal determination sought to be proved (i.e., the reference teachings establish a *prima facie* case of obviousness) is more probable than not." Id.

To reject a claim based on "combining prior art elements according to known methods to yield predictable results . . . Office personal must articulate . . . (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference . . ." See **MPEP** § 2143A, page 2100-129 (Rev. 6, Sept. 2007).

To establish a motivation to combine the Office must articulate "a finding that there was some teaching, suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." See **MPEP** § 2143G, page 2100-138 (Rev. 6, Sept. 2007).

"The motivation to combine may be implicit and may be found in the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved." Id. (citing Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co., 464 F.3d 1356, 1366; 80 USPQ2d 1641, 1649 (Fed. Cir. 2006)).

However, "[i]f the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to

make the proposed modification." **MPEP** § 2143.01V. Page 2100-140 (Rev. 6, Sept. 2007) (citing In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

Additionally, "[i]t is improper to combine references where the references teach away from their combination." **MPEP** § 2145XD2, page 2100-168 (Rev. 6, Sept. 2007) (citing In re Grasselli, 713 F.2d 731, 743; 218 USPQ 769, 779 (Fed. Cir. 1983)). Further, "[w]hen the prior art teaches away from combining certain known elements, discovery of successful means of combining them is more likely to be nonobvious." See KSR International Co. v. Telflex, Inc., 550 U.S. ___; 82 USPQ2d 1385, 1395 (2007).

2. Summary of the Cobbley Reference

Cobbley discloses a "method and apparatus [that] generates and transfers a stream of broadcast information which includes multiple video and audio information segments to a receiving device." Cobbley, Abstract, lines 1-3.

The Cobbley "receiving device" may be various devices such as a VCR, television set, computer, etc. See Cobbley, col. 3, lines 58-61. The receiving device receives a transmission from a broadcast source (see id. FIG. 1, 105) that "includes both the video data and/or audio information data being presented to the end users and various control, indexing and text information." See id. col. 3, lines 49-54. The "*indexing information* is transmitted by the broadcast source 105 *concurrently* with the video and/or audio news broadcast." See id. col. 4, lines 13-15 (emphasis added). "Alternatively, the indexing information may be generated and input into the broadcast stream automatically by the broadcast source." Id. col. 4, lines 13-15.

Other methods are disclosed for obtaining the indexing information, "[f]or example, the indexing information may be generated by scanning closed caption information . . . [or] may be

generated on the receiving end by scanning the received audio [video] data utilizing a speech [image] recognition process." Id. col. 4, lines 43-50.

Cobbley also discloses an "[i]ndex data capture device 112 [that] receives the broadcast information from broadcast receiver 110 and obtains the indexing information from the broadcast information." Id. col. 6, lines 12-14. A "capture device 115 receives the broadcast information from broadcast receiver 110." Id. col. 6, lines 33-36. The capture device also converts analog video/audio data into a digital form suitable for presentation via a computer system, and to optionally compress the digital form of the video/audio data for storage. Id. col. 6, lines 37-45. A "cache manager 125" receives both the digital (and sometimes compressed) audio/video information, as well as the extracted indexing information (see id. col. 6, line 60 – col. 7, line 52) and operates to associate the audio/video information and the indexing information together. See id. col. 7, line 58 – col. 8, line 3. The cache manager 125 may subsequently inform a user about the audio/video information and associated indexing information thus stored and, in response to a user request for one or more specific "story segments", provide the selected story segments to a "client system 140" for subsequent presentation to the user. See id. col. 9, lines 53-67.

As noted above, Cobbley's index data capture device 112 extracts indexing information from the broadcast transmission. See id. col. 6, lines 12-14. In addition to the above, Cobbley was described in Applicant's previous response of record. See Applicant's Response to the USPTO Office Action mailed on Jul. 26, 2007 (dated Oct. 26, 2007) [hereinafter "26-Oct-07 Response"].

3. Summary of the *Narayanaswami* Reference

Narayanaswami discloses "an image capturing system and method for automatically watermarking a plurality of recorded camera and image parameters such as the location . . .

orientation of the principal axis of the camera," various other information related to the camera settings, photographer information, and time and date. See Narayanaswami, Abstract.

The image capturing system is further described as a "digital camera . . . [that] includes a central processing unit (CPU)." See id. page 3, ¶ 0033. "The CPU . . . also includes an image/parameter processor module . . . for recording a plurality of parameters . . . onto digital images and for compressing the digital images using know data (image) compression techniques such as the Joint Photographic Expert Group (JPEG) standard." Id. page 3, ¶ 0033. "Also included is a GPS receiver 114 operatively connected between an RF port 116 (e.g., an antenna) and the CPU 102, for recording the geographic position (e.g., latitude, longitude, and altitude) of the camera 100, as well as Universal Time Coordinated (UTC) time and date and local time and date when an image is taken." Id. page 3, ¶ 0035. "The camera 100 preferably includes a radio frequency (RF) processor 112, operatively connected between the CPU 102 and the RF port 116, for processing incoming RF, as well as transmitting RF information, via the RF port 116 using conventional constructions and techniques. The device may also include an infrared (IR) processor . . ." "[T]he IR processor 118 and the RF processor 112 may be utilized for communicating with objects in a scene being photographed (assuming the objects being photographed are transmitting either RF or IR signals) so as to obtain and record information such as the name and identity of the object." Id. page 3, ¶ 0038.

The "parameters" include location and time, but are primarily related to the specific camera settings being used to create the image. See id. page 4, ¶ 0043. For example, aperture, flash status, auto focus distance and light meter reading are included.

The system of Narayanaswami requires a user to "enter the desired parameters which are to be recorded and/or watermarked into the camera 100 via the input/display 126. See id. page 5, ¶ 0049 and FIG. 3, items 300, 302. An image may then be captured "with [the] recorded

parameters." See id. FIG. 3, item 304. "The photographer will then take pictures . . . and the specified parameters (e.g., location, date and time) will be recorded with each captured image (step 306)." See id. page 5, ¶ 0049; FIG. 3. "Watermarking" or "stamping" is defined as "hiding" the parameters within the pixels of the image. See id. page 2, ¶ 0012 "During an image stamping process, the stamping information is invisibly embedded (i.e., stamped) into a source image in accordance with a defined mapping process to produce a stamped image." See Id. page 2, ¶ 0013. "In other words, the stamping information is perceptually invisible and any modification on the image alters the stamping information . . ." Id. page 2, ¶ 0013. The watermarking process changes alters the pixels of the image in order to hide the parameters. See id. 6, ¶ 0052 to 8, ¶ 0081.

4. *Narayanaswami* does not teach "index information separate from the media file from an external source related to the subject and comprising an event indicator that a specific event is occurring" as recited by Applicant's independent claim 1

The Examiner has admitted that "Cobbley didn't disclose: index information separate from the media file from an external source (105, fig. 1) related to the subject and comprising an event indicator that a specific event is occurring." See USPTO Final Office Action, page 3 (mailed Dec. 12, 2007) [hereinafter "Final"]. Applicant agrees. The Examiner has therefore relied upon Narayanaswami as disclosing "index information separate from the media file from an external source related to the subject and comprising an event indicator that a specific event is occurring (i.e., camera 100 also included is a GPS receiver 114, operatively connected between an RF port 116 and the CPU 102 for recording the geographic position (e.g., latitude, longitude, and altitude) of the camera 100, as well as universal time coordinated (UTC) time and date and

local time and date when an image is taken ....[(]See paragraph 0035, Narayanaswami)." See Final, at 3. Applicant finds several deficiencies with this argument.

First, it is questionable whether any information utilized and disclosed by Narayanaswami is, or could be considered to be, "indexing information." The information referred to by the Examiner is explicitly described by Narayanaswami as being used for "watermarking" which Narayanaswami defines as "hiding" the parameters within the pixels of the image. See Narayanaswami, page 2, ¶ 0012, ¶ 0013; Final, at 3 (regarding the camera information and geographic data).

The Applicant has provided a definition of the term "indexing information" as "related directly to the subject of the media file" and as "descriptive of the subject, i.e. [a]s the semantic content being captured in the media file." See Applicant's Published Specification, U.S. Patent Application Publication No. 2004/0015467 page 1, ¶ 0009 (published Jan. 22, 2004) [hereinafter "Spec."].

While Applicant understands that "indexing information" must be given its broadest interpretation, terms must also be given their plain meaning, that is, "the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention . . ." See Phillips v. AWH Corp., 415 F.3d 1303, 1313, 75 USPQ2s 1321, 1326 (Fed. Cir. 2005) (*en banc*); See also generally MPEP § 2111.

Arguably, one skilled in the art would understand that "indexing information" is for creating a searchable database or, at least, a searchable set of records or files that can be accessed using the indexing information. As explicitly stated in the Applicant's specification, "[t]he index information associated with the media files allows the user to search the plurality of media files." See Spec., page 1, ¶ 0009. In contrast, "watermarking," which is explicitly defined as "hiding"

information within an image file by Narayanaswami, would be understood by one of ordinary skill to be exactly that, hidden information. See Narayanaswami, page 2, ¶¶ 0012, 0013.

Assuming *arguendo* that this Board finds any information disclosed by Narayanaswami to be "indexing information," it is clear from the disclosure of Narayanaswami that any such information disclosed by Narayanaswami is not used by Narayanaswami as "indexing information" as would be understood by one of ordinary skill in the art. Understanding "indexing information" to be searchable it is also therefore readable. Having the information not be secret, and hidden in the image, would result in the information being subject to alteration, or duplication, by a hacker which is exactly contrary to the disclosure of Narayanaswami. See Narayanaswami, page 2, ¶ 0013 ("the stamping information is perceptually invisible and any modification on the image alters the stamping information, and an attacker cannot restore the altered invisible mark stamped onto the image"). Therefore, Narayanaswami fails as a reference to disclose the element of claim 1 as relied upon by the Examiner. See Final, at 3.

Further, Narayanaswami, like Cobbley as admitted by the Examiner, has no disclosure of "an event indicator that a specific event is occurring" as recited by claim 1. See Final, at 3. The claim terminology here has a plain meaning and none of the information cited by the Examiner describes such an event indicator. For example, "geographic position, (e.g., latitude, longitude, and altitude) of the camera . . . time and date and local time and date when an image is taken . . ." are not "an event indicator that a specific even is occurring." See Final, at 3. Time and geography alone are not an event indicator as understood by anyone let alone one of ordinary skill. Again with the understanding that terminology must be given its broadest interpretation, the Applicant has defined the term "an event indicator that a specific event is occurring" by way of example. The "an event indicator that a specific even is occurring" could provide notification of "nearby activities, such as a parade or fireworks." See Spec., page 2, ¶ 0012. The event

indicator may be "*based on* the time indicator, a global position indicator ..." etc., but these pieces of information are not considered to be "an event indicator that a specific event is occurring" in and of themselves. See Spec., page 2, ¶ 0025 {emphasis added}. This further evidences that Narayanaswami fails as a reference to disclose the element of claim 1 as relied upon by the Examiner. See Final, at 3.

In light of the above arguments, the references relied upon by the Examiner, namely Cobbley and Narayanaswami, fail to establish *prima facie* obviousness under 35 U.S.C. § 103 because the references fail to teach or suggest all of Applicant's claim 1 limitations, whether individually, or in combination. Therefore, prima facie obviousness under 35 U.S.C. § 103 has not been established. See **MPEP** § 2143A. page 2100-129.

5. *Narayanaswami* teaches away from "index information separate from the media file from an external source related to the subject and comprising an event indicator that a specific event is occurring" as recited by Applicant's independent claim 1

As discussed above in ¶ A4., it is clear from the disclosure of Narayanaswami that Narayanaswami is not using "indexing information" as would be understood by one of ordinary skill in the art. Understanding "indexing information" to be searchable and/or readable information, if Narayanaswami's system used the "watermarking" information as indexing information, then this would result in the information being subject to alteration, or duplication, by a hacker. See Narayanaswami, page 2, ¶ 0013 ("the stamping information is perceptually invisible and any modification on the image alters the stamping information, and an attacker cannot restore the altered invisible mark stamped onto the image").

Therefore, Narayanaswami teaches away from using its information as "indexing information" and it is improper to combine it with Cobbley for this purpose. See MPEP § 2145XD, page 2100-168.

6. There is no motivation to combine *Cobbley* and *Narayanaswami* because at least *Narayanaswami* would be "unsatisfactory for its intended purpose"

Any modification of Narayanaswami to "provide a automatic recording a plurality of camera and image parameters (index information such as time, date, location) with each captured digital image" as reasoned by the Examiner would render Narayanaswami "unsatisfactory for its intended purpose" as discussed above. See MPEP § 2143.01V. Page 2100-140; Final, at 3. The indexing information would enable "an attacker [to] restore the altered invisible mark stamped onto the image" because the information would be accessible as "indexing information." See Narayanaswami, page 2, ¶ 0013.

Modifying the Cobbley system by adding watermarking data to the media files would not result in the Applicant's claimed invention because the watermarking data of Narayanaswami must be hidden within the media files. Therefore, adding the watermarking data of Narayanaswami could not result in having "indexing information" associated with the media file and suitable for establishing a searchable system.

Therefore, the alleged motivation to combine Cobbley and Narayanaswami runs afoul of the express teachings of Narayanaswami teaching away from the asserted combination. See **MPEP** 2143.01V. Page 2100-140.

7. *Cobbley* and *Narayanaswami* fail to establish a prima facie case with respect to dependent claims 4, 5, 6 and 7

a. Regarding dependent claim 4

As discussed above in ¶A4 and ¶A5, Cobbley and Narayanaswami are insufficient for rejecting claim 1, and claim 4 includes all elements of claim 1. In addition, claim 4 provides the feature of "searching the plurality of stored media files using the index information and enabling a commercial system with the plurality of stored media files using the index information." As discussed, the system disclosed by Narayanaswami does not lend itself to a searchable system because Narayanaswami hides information in the file.

Further, there is no disclosure in either Cobbley or Narayanaswami of "enabling a commercial system . . ." The Examiner's cited portion of Cobbley refers to a searching for "news titles, such as a professional sports team name" which are only titles and does not disclose "enabling a commercial system." See Final, at 5. The Applicant has also provided guidance regarding the term "commercial information" as "compris[ing] information related to commercial activity, such as information relating to a particular retail item, information relating to product availability, pricing, shipping information, [and] a universal resource locator (URL) to access further information, such as via a company website." See Spec., page 2, ¶ 0026.

Therefore, Cobbley and Narayanaswami, individually or in combination do not teach all elements of claim 4 and thus are insufficient to establish a *prima facie* case.

b. Regarding dependent claim 5

Claim 5 also includes all elements of claim 1 and in addition "the index information, prior to being associated with the media file, is transmitted from a media indexing beacon."

In Cobbley, the "*indexing information* is transmitted by the broadcast source 105 *concurrently* with the video and/or audio news broadcast." See Cobbley, col. 4, lines 13-15 (emphasis added). "Alternatively, the indexing information may be generated and input into the broadcast stream automatically by the broadcast source." Id. col. 4, lines 13-15. Cobbley teaches that indexing information is sent along with the broadcast information and therefore

association arguably must occur at the broadcast side of the system. Further there is no media indexing beacon disclosed by Cobbley.

Narayanaswami discloses that "parameters" which are for "watermarking" and not for "indexing," must first be entered into the system by a user. Specifically, "the [user] will enter the desired parameters which are to be recorded and/or watermarked into the camera 100 via the input/display 126." See Narayanawami, page 5, ¶0049. "The photographer will then take pictures of the [subject] and the specified parameters (e.g., location, date and time) will be recorded with each captured image." Id. "In addition, the parameters that are specified to be watermarked will be stamped into each captured image and the corresponding verification key (which is based on the watermarked parameters) will be generated. Id. An identification file may alternatively be separately created and downloaded via RF transmission to a server. Id.

Assuming *arguendo* that this Board finds the Narayanaswami "parameters" to be "indexing information," the requirement of the user or photographer to enter desired parameters, that is, to specify parameters creating an association with a yet to be created media file is contrary to the recited feature of claim 4. Narayanaswami does not disclose a media indexing beacon transmitting index information to a media capture device *prior to* the index information being associated with the media file.

Applicant contends that Cobbley and Narayanaswami fail to establish a *prima facie* case for claim 4.

c. Regarding dependent claim 6

Claim 6 includes all elements of claims 1 and 5, and in addition requires that "the indexing information is in response to an index information request." The Examiner relies on Cobbley wherein an "end user requests a particular segment stored in caches 130, such as by the title of keywords, the cache manager is able to quickly retrieve the most recent version of the

requested information and return it to the user, col. 8, lines 8-15, Cobbley." See Final, pages 5 to 6.

Applicant hardly comprehends how retrieving information from a memory cache can be related to requesting indexing information (as in claim 6), from a media beacon (as in claim 5) so that the indexing information can be associated with a media file by a media capture device. That is, no reasonable interpretation would equate the claimed indexing information from an external media beacon with the segments stored in cache as taught by Cobbley. The mere reference to a "request" in both instant claim 7 and the cited portions of Cobbley fail to overcome this deficiency.

No *prima facie* case has been established with respect to claim 6 in light of the references failure to teach a media indexing beacon or an index information request to said beacon for indexing information from a media capture device.

d. Regarding dependent claim 7

Claim 7 includes all elements of claim 1 and further requires commercial information and a universal resource locater as part of the index information. As discussed above with respect to claim 4, the references fail to teach "commercial information" and URLs. A *prima facie* case has not been established for claim 7.

8. *Cobbley* and *Narayanaswami* fail to establish a prima facie case with respect to independent claims 8 and 13

Regarding independent claim 8, the Examiner stated that, "all the limitations of these claims have been noted in the rejection to claim 1." Final, at 6. Applicant disagrees and notes that the Examiner did not properly address all of the limitations recited by claim 8. Claim 8 is directed to a "media indexing beacon external to a media capture device."

As noted above in paragraphs A4 through A6, neither Cobbley (by the Examiner's own admission) nor Narayanaswami discloses "index information relating to a subject and comprising an event indicator that a specific event is occurring."

In addition, neither Cobbley nor Narayanaswami discloses "receiving an index information request that is generated by the media capture device" contrary to the Examiner's assertion. See Final, at 6. Further, as discussed above in section A6c regarding claim 6, neither Cobbley nor Narayanaswami discloses "transmitting the index information relating to the subject separately to the media capture device in response to receiving the index information request." See Final, at 6.

The Examiner relies on Cobbley col. 6, lines 12-32 wherein an "index capture device 112 receives the broadcast information from the broadcast receiver and obtains the indexing information from the broadcast information" as receiving an index information request that is generated by a media capture device. Final at 6. However, there is no "index information request" disclosed by Cobbley. The portion of Cobbley cited by the Examiner clearly shows that a request for indexing information is not required in Cobbley because the system "obtains the indexing information from the broadcast information." See Cobbley, col. 6, lines 12-14.

Likewise for the claim element of "transmitting the index information relating to the subject separately to the media capture device," Cobbley col. 6, lines 12-32 as referenced by the Examiner proves insufficient. See Final at 6. Clearly the indexing information in Cobbley is sent together (not separately) with the broadcast information. Cobbley explicitly states that the "*indexing information* is transmitted by the broadcast source 105 *concurrently* with the video and/or audio news broadcast." See Cobbley col. 4, lines 13-15 (emphasis added).

A *prima facie* case has not been established for claim 8. Claim 13 is a method claim having the feature of "providing index information separate from the media file from a media

indexing beacon to the media capture device, wherein the media indexing beacon is external to the media capture device and the index information relates to the subject in the media file and comprises an event indicator that a specific event is occurring." Therefore, in light of the above, a *prima facie* case has not been established for claim 13.

9. *Cobbley* and *Narayanaswami* fail to establish a prima facie case with respect to independent claims 19, 25, 27 and 29

Regarding claim 19, the Examiner cited Cobbley at col. 4, lines 25-35 as disclosing "a media indexing beacon which generates a beacon signal containing index information relating to a subject and comprising an event indicator that a specific event is occurring." See Final, pages 8 to 9. The cited portion here does not disclose an indexing beacon or further does not disclose a "media capture device that . . .[separately] from the media indexing beacon . . . captures the subject in a media file and separately receives the beacon signal . . ." The system of Cobbley sends indexing information along with the broadcast information and combines the media file and its indexing information ***at the source*** of the broadcast. See Cobbley, col. 4, lines 25-30. Cobbley states that, "the indexing information may be generated and ***input into the broadcast stream*** automatically ***by the broadcast source***." See id. (emphasis added).

Regarding claim 25 and 29, the Examiner stated that, "all the limitations of these claims have been noted in the rejection of claims 1 and 8." As stated in our sections A4 through A8 above, various deficiencies are present in the rejections of claims 1 and 8 and therefore these deficiencies apply to the Examiner's rejection of claims 25 and 29.

Regarding claim 27, the Examiner stated that the grounds of rejection for claim 27 were included in the grounds of rejection for claim 1. See Final at 2. However, there are features of claim 27 that differ from claim 1 and these features were not addressed by the Examiner with respect to claim 27. Specifically, claim 27 includes "a media indexing beacon." As discussed

above, Cobbley *inter alia* does not disclose a media indexing beacon. Grounds of rejection for claim 27 have not been properly established.

10. Prima Facie Obviousness Has Not Been Established Using *Cobbley* and *Narayanaswami* for independent claims 1, 8, 13, 19, 25, 27 and 29, therefore dependent claims 2-7, 10-12, 14-18, 20, 23, 24 and 32 cannot be properly rejected

With regard to claims 2-7, 10-12, 14-18, 20-24 and 32, Applicant notes that these claims are dependent upon independent claims 1, 8, 13, 19, 25, 27 and 29. In addition to the arguments presented above for various dependent claims, all the dependent claims (2-7, 10-12, 14-18, 20-24 and 32) also incorporate the features of claims 1, 8, 13, 19, 25, 27 and 29. Therefore, the dependent claims have not been properly rejected in light of the arguments presented above for claims 1, 8, 13, 19, 25, 27 and 29.

a. Regarding claims 21 and 22

Claim 21 is a dependent claim that depends from claim 19, and claim 22 depends from claim 21. Claims 21 and 22 were rejected under 35 USC § 103(a) over Cobbley in view of Narayanaswami and further in view of Katseff. See Final at 11. However as noted above Cobbley, and Narayanaswami, individually or in combination, do not teach all claim limitations of independent claim 19 as required to establish prima facie obviousness.

Further, the Examiner has admitted that Cobbley, and Narayanaswami do not teach "wherein the media indexing beacon further comprises: at least one index buffer comprising he index information; and a transmitter operably coupled to the at least one index buffer, wherein the transmitter provides the index information to the media capture device." See Final at 11. Applicant agrees.

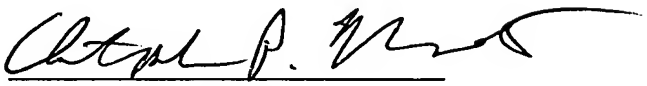
However the failure of Cobbley, and Narayanaswami to disclose the various other features of the claims is not remedied by the additional teachings of Katseff. Katseff is related to "a networked multimedia information system which may be utilized to record, store and distribute multimedia presentations together with any supplemental materials that may be referenced during the presentation." See Katseff, Abstract. Katseff does not appear to disclose *inter alia* "a media indexing beacon which generates a beacon signal containing index information relating to a subject and comprising an event indicator" or "a media capture deice, separate from the media indexing beacon . . ." as per claim 19, from which claims 21 and 22 depend. Therefore, a *prima facie* case has not been established for claims 21 and 22 by any of the cited references.

B. Conclusion

Prima facie obviousness under 35 U.S.C. § 103 has not been properly established for any of Applicant's independent claims because the references relied upon do not properly disclose all limitations recited. Further, Applicant has shown that there is no motivation to combine the references and that at least one reference teaches away from the cited combination. The Applicant believes the preponderance of evidence lies in favor of non-obviousness of the claims and that this Board should therefore overturn the obviousness rejections, or provide any relief the Board deems fair and equitable in light of the arguments presented.

Respectfully submitted,

Andrew E. Fano, et al.

by: 

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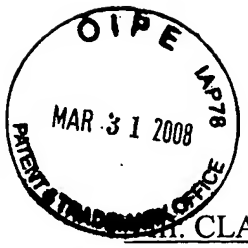

VIII. CLAIMS APPENDIX

Claims 1 through 8, 10 through 22, 23 through 25, 27, 29 and 32

1. A method for media indexing comprising:

capturing a subject in a media file with a media capture device;

automatically receiving, by the media capture device, index information, separate from the media file from an external source, related to the subject and comprising an event indicator that a specific event is occurring; and

associating, by the media capture device, the index information with the media file.

2. The method of claim 1 wherein associating the index information with the media file further comprises:

encoding the index information into the media file.

3. The method of claim 1 further comprising:

providing the media file and the index information to a media file storage device which comprises a plurality of stored media files having index information associated therewith; and

storing the media file along with the plurality of stored media files;

4. The method of claim 3 wherein the media file storage device stores the media file and index information, the method further comprising at least one of the following:

searching the plurality of stored media files using the index information and enabling a commercial system with the plurality of stored media files using the index information.

5. The method of claim 1 wherein the index information, prior to being associated with the media file, is transmitted from a media indexing beacon.

6. The method of claim 5 wherein receiving the index information is in response to an index information request.

7. The method of claim 1 wherein the index information comprises at least one of the following: a time indicator, a landmark indicator, a global positioning system indicator, commercial information, a universal resource locator, and a proximity indicator.

8. In a media indexing beacon external to a media capture device, a method for media indexing comprising:

storing index information relating to a subject and comprising an event indicator that a specific event is occurring;

receiving an index information request that is generated by the media capture device; and

transmitting the index information relating to the subject separately to the media capture device in response to receiving the index information request.

10. The method of claim 8 wherein the media capture device receives the index information and associates the index information with a media file.

11. The method of claim 8 wherein the index information is wirelessly transmitted to the media capture device.

12. The method of claim 8 wherein the index information comprises at least one of the following: a time indicator, a landmark indicator, a global positioning system indicator, commercial information, a universal resource locator and a proximity indicator.

13. A method for media indexing comprising:

capturing a subject in a media file with a media capture device;

providing index information separate from the media file from a media indexing beacon to the media capture device, wherein the media indexing beacon is external to the media capture device and the index information relates to the subject in the media file and comprises an event indicator that a specific event is occurring; and

associating, by the media capture device, the index information with the media file.

14. The method of claim 13, prior to providing index information from the media indexing beacon to the media capture device, further comprising

detecting, by the media capture device, a user input to capture the media file; and

providing, by the media capture device, an index information request to the media indexing beacon.

15. The method of claim 13 further comprising:

providing, by the media capture device, the media file having the index information associated therewith to a media file storage device.

16. The method of claim 15 wherein the media file storage device comprises a plurality of stored media files having index information associated therewith, the method further comprising:

searching the plurality of stored media files using the index information.

17. The method of claim 13 wherein the index information comprises at least one of the following: a time indicator, a landmark indicator, a global positioning system indicator, commercial information, a universal resource locator and a proximity indicator.

18. The method of claim 17 wherein the index information enables a media file to be utilized by at least one commercial system, wherein the at least one commercial system comprises at least one of the following:

a workflow system, a procurement system, a retail sales system, and a safety inspection/auditing system.

19. A media capture and indexing system comprising:

a media indexing beacon which generates a beacon signal containing index information relating to a subject and comprising an event indicator that a specific event is occurring; and

a media capture device, separate from the media indexing beacon, that captures the subject in a media file and separately receives the beacon signal from the media indexing beacon and associates the index information with the media file.

20. The media capture and indexing system of claim 19 wherein the media capture device captures a plurality of media files each having index information associated therewith, the system further comprising:

a media file storage device that receives the plurality of media files, wherein the plurality of media files may be indexed based on the index information.

21. The media capture and indexing system of claim 19 wherein the media indexing beacon further comprises:

at least one index buffer comprising the index information; and

a transmitter operably coupled to the at least one index buffer, wherein the transmitter provides the index information to the media capture device.

22. The media capture and indexing system of claim 21 wherein the media indexing beacon further comprises a receiver that receives an index information request from the media capture device, wherein the transmitter transmits the index information in response to the index information request.

23. The media capture and indexing system of claim 19 wherein the media capture device further comprises:

a media input module which generates the media file in response to a media file generation request;

a processor operably coupled to the media input module to receive the media file; and

an index information receiver operably coupled to the processor, wherein the index information receiver receives the beacon signal and provides the index information to the processor, wherein the processor associates the index information with the media file.

24. The media capture and indexing system of claim 23 wherein the index information receiver further contains a transmitter that transmits an index information request to the media indexing beacon.

25. A system for media indexing comprising:

means for storing index information relating to a subject and comprising an event indicator that a specific event is occurring;

means for transmitting a beacon signal wherein the beacon signal comprises the index information; and

a media capture device, separate from the means for transmitting the beacon signal, that captures the subject in a media file, wherein the media capture device separately receives the index information from the beacon signal and associates the index information with the media file.

27. An apparatus for media indexing comprising:

means for capturing a subject in a media file;

means for receiving, from a media indexing beacon external to the apparatus, index information separate from the media file related to the subject and comprising an event indicator that a specific event is occurring; and

means for associating the index information with the media file.

29. A computer readable medium having stored thereon:

a media file of a subject; and index information, associated with the media file, wherein the media file and index information are stored on the medium at substantially the same time; and

wherein the media file is captured by a media capture device and the index information, comprising an event indicator that a specific event is occurring, is transmitted separately to the media capture device by a media indexing beacon external to the media capture device.

32. The apparatus of claim 27 wherein the apparatus comprises a digital camera and wherein the means for receiving index information includes a wireless receiver.

IX. EVIDENCE APPENDIX

Patents and Patent Application Publications

U.S. Patent No. 5,818,510 (issued Oct. 6, 1998), of record, initially entered by Examiner in USPTO Office Action, page 2 (mailed: Jul. 26, 2007).

U.S. Patent Application Publication No. 2003/0011684 (published Jan. 16, 2003), of record, initially entered by Examiner in USPTO Final Office Action, page 2 (mailed: Dec. 12, 2007).

U.S. Patent No. 5,822,537 (issued Oct. 13, 1998), of record, initially entered by Examiner in USPTO Office Action, page 5 (mailed: Mar. 1, 2005).

Applicant's Published Specification: U.S. Patent Application Publication No. 2004/0015467 (published Jan. 22, 2004).

United States Patent and Trademark Office, Office Actions Of Record

USPTO Office Action, (mailed: Jul. 26, 2007).

USPTO Final Office Action, (mailed Dec. 12, 2007).

Applicant's Responses to Office Actions

Applicant's Response to the USPTO Office Action mailed on Jul. 26, 2007 (dated Oct. 26, 2007).

X. RELATED PROCEEDING APPENDIX

None.